



PRE-VETERINARY

COLLEGE OF ARTS & SCIENCES

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Health Sciences Advisors:

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It is our goal at UND to prepare students for any veterinary school in the country. Seats in veterinary school entering classes are limited – approximately 3,200 seats are available across the country each year. The national ratio of qualified applicants per available seat is approximately 2:1. Individual schools, however, will see much higher numbers. Getting accepted into any veterinary school is done through a highly competitive, two stage application process. It is extremely important that you are well prepared and able to present the best possible application to veterinary schools when you apply - good planning is key!

The Pre-Veterinary Medicine is not a major or degree granting program. In order to graduate with a degree from UND, students must:

1. Choose a **Major** and complete the specific requirements determined by the department responsible for that major
2. Complete the **Essential Studies Requirements**
3. Complete 125 semester credits (36 of which must be upper divisional credits)

You will be assigned two advisors while pursuing your degree and the Pre-Vet Program at UND:

- A major advisor (from your major department) to help with the planning of your major curriculum
- The Health Sciences Advisor (from the College of Arts & Sciences) to help with all aspects of veterinary school preparation

Joining the Pre-Vet Program is easy!:

1. Incoming freshmen students should plan to attend Summer Orientation - you can declare Pre-Vet at that time
2. Current or transfer students can declare Pre-Vet by stopping by the A&S main office or by calling us at 701-777-2749

Staying in the Pre-Vet Program is hard!:

1. *Incoming Freshmen* must:
 - Attend all freshmen group advising meetings during the fall semester
 - Attend one freshmen group advising meeting during the spring semester
 - Complete the following courses, with a C grade or better, before the start of sophomore year:
 - Bio 150-151, with labs
 - Math 103 (may test out of this with an ACT Math score of 26, or appropriate Math placement test score)
 - Chem 121-122, with labs
 - Maintain a cumulative GPA of 3.0 or higher during freshman year
2. *Transfer students, or current students* switching to Pre-Vet after freshman year, must:
 - If not already completed at UND or transferred in, complete the following courses with a C grade or better:
 - Bio 150-151, with labs
 - Math 103
 - Chem 121-122, with labs
 - Have a cumulative GPA of 3.0 or higher
3. *All continuing Pre-Vet students* must:
 - Take Pre-Vet courses as advised
 - Prepare for and take the GRE
 - Keep cumulative GPA and science GPA competitive

Veterinary schools consider a variety of factors when reviewing applications:

1. Academics

a. Undergraduate Preparation

Admission into veterinary school typically requires completion of a Bachelor's degree or at least 90 credits from an accredited college or university. All vet schools have specific content or course prerequisites which are included in the UND Pre-Vet Program. UND accepts AP and post-secondary transfer credits toward the completion of a bachelor's degree in accordance with the NDUS policies of [General Education Requirement Transfer Agreement](#) (GERTA) and [Common Course Numbering](#) (CCN). UND also has numerous articulation agreements and course equivalencies with other academic institutions. You should, however, check with the medical schools on your wish list regarding the post-UND implications of any AP, IB, CIS, CLEP, on-line, distance learning or community college work you plan to complete prior to your undergraduate matriculation.

b. Major

Vet schools do not require any particular major, so technically, any major is fine. While Biology seems to be the most appropriate major at UND for Pre-Vet students, you should pick something you are good at, or enjoy studying, or fits your "plan B" if you don't end up going to vet school. A list of each major and degree offered at UND may be found at: <http://und.edu/academics/registrar/fields-of-study.cfm>. Click on a particular major to see what you will be studying, as well as opportunities and careers associated with that major. For specific requirements and course descriptions, click on the [Academics – Check out the courses you'll take](#) link on the right side of each major page. Four year plans (i.e., schedule of courses) for each degree are listed by college and are posted online at: <http://und-public.courseleaf.com/4yearplan/>.

The combination of the Pre-Vet program with a major in the College of Arts and Sciences can usually be finished in 4 years if started freshmen year. The combination of the Pre-Vet program with a major in Athletic Training, Aviation, Engineering, Education, Nursing, Nutrition or Medical Laboratory Science will take longer. Because these particular majors include busy curricula and/or practicums, in most cases if you plan to combine one of them with Pre-Vet, you will need at least 5 years of undergraduate studies to do so.

c. GPA

Since graduate school (i.e. vet school) is tougher than undergraduate school, you need to leave no doubt of your academic ability by excelling at the undergraduate level. Average cumulative GPA of recent veterinary school matriculants across the nation: 3.5 – 3.6.

2. GRE

a. Timing

This rigorous exam is required by most vet schools – students planning to finish their undergraduate degrees in 4 years typically take the GRE in May or June after their 3rd year (junior year) of college. While retakes are allowed, it is best to "do it right the first time".

b. Preparation

Since considerable time (2+ hours/week) needs to go into GRE preparation, UND students are encouraged to take a lighter load (12 credits) during the spring semester of their junior year to give them room for reviewing and practice testing on their own.

c. Scores

Average national GRE scores for recent veterinary school matriculants:

Verbal: 65.7 percentile

Quantitative: 58.1 percentile

Writing: 55.8 percentile

3. Life Experiences

- a. Real World - Direct Animal Care Experience => 1000-2000 hours
 - Veterinary schools expect you to spend considerable time working in veterinary health care. You need to get a job in which you give direct medical care to animals, have a chance to observe veterinarians, and have a supervisor observing you (most vet schools require a letter of recommendation from a veterinarian and a work supervisor).
 - You may need to combine several jobs to get the experience and understanding of veterinary medicine you need. Work settings can include a vet hospital, kennel, humane society/rescue, stable, ranch, zoo, training facility, groomer, pet store, etc.
- b. Shadowing => 40-80 hours
 - Get a good feel for the profession by shadowing as many different kinds of veterinarians as possible: small animal, large animal, exotic animal, wildlife, etc.
 - Be sure to include both rural and city experiences
- c. Community Service => These activities will set you apart!
 - Do things that you love, have a passion for, demonstrate your desire to serve others and give back, show your love of learning, let your leadership skills shine, etc.
 - These volunteer activities/paid jobs include, but are not limited to:
 - Lifeguards, first responders
 - Coaching/teaching sports (for park boards, travelling leagues, Special Olympics, etc.)
 - Camp counseling (church camps, day camps, medical camps, music camps, etc.)
 - Big Brother/Big Sister, Meals on Wheels, Relay for Life, etc.
 - Volunteering at your local city mission, free clinic, humane society, etc.
 - College organization participation or leadership (clubs, honor societies, sororities/fraternities, etc.)
 - College tutoring or TA positions
 - Medical missions trips (through college organizations, national organizations, or local churches)
 - Church work/sponsored activities (Sunday school teacher, youth worker, mission trips, etc.)
 - American Red Cross, Peace Corps
- d. Research => expected of students planning to attend top tier veterinary schools
 - UND has numerous opportunities for doing undergraduate basic science research during summer breaks or the school year – you may apply for positions that either pay or give you college credit
 - Regional labs or companies may offer summer opportunities
 - National labs (the NIH and the CDC) have some summer positions for college students
- e. Keep a log of all hours

Although formal documentation is not needed, you should keep a simple personal log for all experiences/work in a notebook – be sure to include dates, times, activities, impressions, and note any meaningful patients or experiences. You will also need to provide contact information for someone who witnessed you in each experience or circumstance, so make note of that as well!

4. Letters of Recommendation

- a. You will need 3-4 letters of recommendation or evaluation for most veterinary schools.
- b. Letters need to address the personal attributes and academic abilities that make you a good fit for vet school and the profession of veterinary medicine.
- c. Authors will have to include at least one veterinarian and one professor, and possibly a work supervisor – make sure they know you very well!

5. Legal Record

- a. Keep legal records clean. All minors and felonies will need to be disclosed on applications.
- b. Keep university records clean. Any institutional actions for code of student conduct violations (behavioral, academic, legal, etc.) will need to be disclosed on applications.
- c. Keep personal social media sites clean (Facebook, Twitter, etc.). Be sure to demonstrate integrity, maturity, wholesomeness and good taste in all postings (verbal, photos, pictures, etc.).

6. Home State Residency

Veterinary schools consider your home state of residency to be where you graduated high school and/or where your parent(s) currently live. You do not become a resident of a state by just attending college there!

Courses included in the **UND Pre-Veterinary Program** fall into one (or more) category. These categories are:

1. Requirements for most vet schools
2. Requirements for UND Biology major
3. Good, additional preparation for veterinary schools

The checklist below will help you keep track of your progress in the Pre-Veterinary Program:

UND courses required by most veterinary schools:

- | | |
|--|--|
| <input type="checkbox"/> Biol 150, 150L General Biology I | <input type="checkbox"/> Math (choose one) |
| <input type="checkbox"/> Biol 151, 151L General Biology II | <input type="checkbox"/> Math 146 Applied Calculus |
| <input type="checkbox"/> Biol 315 Genetics | <input type="checkbox"/> Math 165 Calculus I |
| <input type="checkbox"/> Biol 442, 442L Physio of Organs/Systems | <input type="checkbox"/> AP credit for Calculus |
| <input type="checkbox"/> MBio 302 General Microbiology | <input type="checkbox"/> Psyc 111 Introduction to Psychology |
| <input type="checkbox"/> BMB 301 Biochemistry | <input type="checkbox"/> Engl 110 Composition I |
| <input type="checkbox"/> Phys 211, 211L College Physics I | <input type="checkbox"/> Engl 130 Composition II |
| <input type="checkbox"/> Phys 212, 212L College Physics II ? | <input type="checkbox"/> Comm 110 Public speaking |

UND courses required for the Biology major:

- | | |
|--|---|
| <input type="checkbox"/> Biol 332 Ecology | <input type="checkbox"/> A Statistics course (choose one) |
| <input type="checkbox"/> Biol 341 Cell Biology | <input type="checkbox"/> Psyc 241 Psychological Statistics |
| <input type="checkbox"/> Biol 312 Evolution | <input type="checkbox"/> Soc 326 Sociological Statistics |
| | <input type="checkbox"/> Math 321 Applied Statistical Methods |
| | <input type="checkbox"/> Biol 470 Biometry |

UND electives good for veterinary school preparation (take as many as desired – all are optional):

- | | |
|--|--|
| <input type="checkbox"/> Biol 315R - a very helpful companion course to Biol 315 | <input type="checkbox"/> Biol 418 Systems Biology |
| <input type="checkbox"/> Biol 338 Animal Behavior | <input type="checkbox"/> Bio 420 Neuroscience |
| <input type="checkbox"/> Bio 364, 364L Parasitology | <input type="checkbox"/> Biol 426 Birds and Mammals |
| <input type="checkbox"/> Bio 369, 369L Histology | <input type="checkbox"/> MBio 328 Introduction to Immunology |
| <input type="checkbox"/> Biol 376, 376L Animal Biology | <input type="checkbox"/> PHE 101 Public Health |
| <input type="checkbox"/> Biol 378, 378L Developmental Biology | <input type="checkbox"/> A Business course (your choice) |
| <input type="checkbox"/> Biol 380 Disease Biology | <input type="checkbox"/> Badm 101 |
| <input type="checkbox"/> Bio 390 Endocrinology | <input type="checkbox"/> Econ 201 |
| | <input type="checkbox"/> Econ 202 |
| | <input type="checkbox"/> Mgmt 300 |

The sample schedule shown below indicates when the **Pre-Veterinary** and **Biology major** courses should be taken, and shows the timing for taking the GRE and applying to vet schools. This is not a complete semester schedule! UND students will have to add Essential Studies requirements, and other electives to each semester in the schedules below as needed or desired:

	Freshman	Sophomore	Junior	Senior
Fall	Bio 120 Bio 150, 150L Chem 121, 121L Math 103	Chem 341, 341L Bio 315 (Genetics) Bio 315R (Genetics Recitation) Bio 332 (Ecology)	Physics 211, 211L Bio 442, 442L Bio 364, 364L (Parasitology)? Chem 333, 333L (for minor)?	Bio 480 Bio requirement** Bio 364, 364L (Parasitology)?
	Courses from Group 1*	Courses from Group 1 or 2*	Courses from Group 2 or 3*	Courses from Group 2, 3 or 4* 2^o Vet School Apps Due <i>(Submit to schools ASAP)</i> Interviews Begin <i>(Usually run October-February)</i>
Spr	Bio 151, 151L Chem 122, 122L Math 146	Chem 342, 342L Bio 341, 341L (Cell Bio) Bio 312 (Evolution)	Physics 212, 212L BMB 301 or Bio requirement**	Bio requirement** Bio requirement** or BMB 301
	Courses from Group 1*	Courses from Group 1 or 2*	Courses from Group 2 or 3* <i>Take a lighter credit load (12 credits) For GRE prep or GRE prep course</i>	Courses from Group 2, 3 or 4*
Sum	<div style="border: 1px solid black; padding: 5px;"> Bio 341 is offered at UND during the summer – to help lighten their load during the regular school year, students may wish to do it after freshman or sophomore year (once Bio 150-151 and Chem 121-122 are completed) </div>		WICHE Forms – ND, MT, WY res only <i>(Complete over Spring Break)</i> GRE (1st one by June 15th) 1^o Vet School Apps Due <i>(Submit to VMCAS by June 30th)</i>	

*Courses listed above and courses in Group 1 are **required**.

Courses from Groups 2, 3 and 4 are **options for Bio requirements/electives** or other **electives**.

Group 1: Eng 110 or 130, Psych 111, Comm 110, a Stats class (Psych 241 or Soc 326);

Group 2: Badm 101, Econ 201 or 202, Med 205, PHE 101

**Group 3 Fall courses: Bio 364+L, Bio 378, Chem 333;

**Group 3 Spring courses: MBio 302+L, Bio 376+L, Bio 338

**Group 4 Fall courses: Bio 390, Bio 420, MBio 328;

**Group 4 Spring courses: Bio 369+L, Bio 338, Bio 426